DO NOT ENTER: /SJ/

Application No.: 10/589,497

Reply to Office Action of February 22, 2010

Docket No.: 0033-1091PUS1

Page 2 of 7

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A hybridization method comprising contacting a solution

comprising a sample biopolymer with only a glass slide, wherein a probe biopolymer is

immobilized to the glass slide,

placing the glass slide into a vessel comprising a solution, wherein a difference in a vapor

pressure between the vessel solution and the solution comprising the sample biopolymer is the

difference in the vapor pressure produced as a difference in molar concentration ranging from -

10% to +8% between solutes in the vessel solution and the solution comprising the sample

biopolymer having the same vapor pressure as the solution comprising the sample biopolymer,

and wherein the vessel solution is not in contact with the solution comprising the sample

biopolymer;

closing the vessel,

hybridizing the sample biopolymer and the probe biopolymer.

2. (Previously Presented) The hybridization method according to claim 1, wherein the

glass slide comprises a hydrophilic region having a surface to which a plurality of probe

biopolymers are immobilized and a hydrophobic region, to which no probe biopolymer is

immobilized, which is formed around the hydrophilic region.

3. (Previously Presented) The hybridization method according to claim 2, wherein the

glass slide is a microarray formed by arranging a plurality of hydrophilic regions to which a

BIRCH, STEWART, KOLASCH & BIRCH, LLP

MSW/LTP/cjw

Application No.: 10/589,497

Docket No.: 0033-1091PUS1 Reply to Office Action of February 22, 2010 Page 3 of 7

plurality of probe biopolymers are immobilized with a hydrophobic region to which no probe

biopolymer is immobilized formed around the arranged plurality of hydrophilic regions.

4. (Withdrawn) A hybridization microarray to be applied to the hybridization according

to claim 1, formed by arranging a plurality of hydrophilic regions to which a plurality of probe

biopolymers are immobilized with a hydrophobic region to which no probe biopolymer is

immobilized formed around the arranged plurality of hydrophilic regions.

5. (Withdrawn) A hybridization kit to be applied to the hybridization according to claim

1, comprising: a microarray formed by arranging a plurality of hydrophilic regions to which a

plurality of probe biopolymers are immobilized with a hydrophobic region to which no probe

biopolymer is immobilized formed around the arranged plurality of hydrophilic regions; and a

closed vessel having an internal space capable of storing said microarray.

6. (Previously Presented) The hybridization method of claim 1, wherein a volume of

solution in the closed vessel is at least five times the quantity of the solution comprising the

sample biopolymer.

7. (Previously Presented) The hybridization method of claim 1, wherein the sample

biopolymer is selected from the group consisting of DNA, RNA, peptide and protein.

8. (Previously Presented) The hybridization method of claim 1, wherein the probe

biopolymer is selected from the group consisting of DNA, RNA, peptide and protein.